

IN THE DRAWINGS

Please replace Sheet 2/2 of the existing drawings with a replacement sheet bearing amended Figure 7, as well as Figures 5-6, and 8, which are not presently amended. For the sake of clarity, Figure 7 is amended to change the cross-hatching of support board 59.

The replacement sheet bearing the drawing with the aforesaid correction of Fig. 7 is contained in an Appendix to the present paper.

REMARKS

Claims 29-38 are currently pending in the instant application, claims 1-28 having previously been cancelled.

In order to emphasize the patentable distinctions of applicant's invention over the prior art, claim 29 has been amended to recite that the claimed anchoring device is configured to: (i) maintain the top element in a predetermined position during use for joinder of the two adjacent boards and the support board; (ii) position the bottom element upon the support board; and (iii) be attached to the support board by the metal fastener to anchor and support the two adjacent boards on the support board.

For the sake of clarity, claim 33 has been amended to expressly recite the decking system as comprising a support board and decking boards situated atop the support board. The bottom element of the attachment device of the decking system is positioned on the support board, on which the adjacent decking boards rest. The anchoring device is anchored by a metal fastener driven therethrough to the support board, whereby the anchoring device joins and supports the decking boards on the support board.

Support for the foregoing amendment is found in the specification, particularly at page 23, line 12, through page 24, line 1-5; page 24, lines 14-16; page 25, lines 1-10; and Fig. 7.

The specification has been amended to correct an obvious typographical error in the "Field of the Invention" section, replacing the word "joint" by the word "joist" at page 2, line 13. Applicant's intent and understanding is apparent from the

fuller description of the invention in the specification, e.g. at page 28, line 15, through page 29, line 5, and page 31, line 14, through page 32, line 3. Both these passages make clear the use of the present anchoring device to secure decking boards to a supporting joist beam.

Claims 29-32 are directed to an anchoring device adapted to secure two adjacent decking boards to a supporting member, while claims 33-38 relate to a decking system comprising decking boards secured to supporting members using an anchoring device, e.g. of the type delineated by claims 29-32. An embodiment of the decking system, including an anchoring device, is depicted by presently amended Fig. 7 of the instant specification, which is reproduced below for convenience.

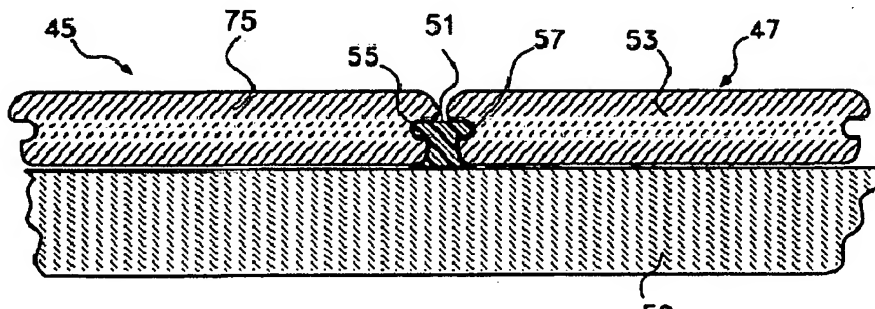


Fig. 7

(USSN 10/037,325)

As set forth by the specification, e.g. at page 31, line 14 to page 32, line 7, as amended, and with reference to amended FIG. 7, first and second horizontal beams (decking boards) 45 and 47 are secured to joist beam 59 using anchoring device 51. Horizontal beams 45, 47 are preferably composed of synthetic polymers, at least partially

foamed synthetic polymer, wood, wood composite, or combinations thereof. Slots 55 and 57 preferably are pre-cut in the respective sides of beams 45 and 47 and preferably extend along the entire length of the beams. The decking system is installed by placing first beam 45 atop joist beam 59, inserting a side of anchoring device 1 into slot 55, and securing anchoring device 51 to joist beam 59 by driving a fastener, such as a nail, staple, or screw (not shown), through device 51 into joist beam 59. Thereafter, the next decking board, e.g. beam 47, is placed alongside beam 45 atop joist beam 59, and slid so that the side of anchoring device 51 opposite beam 45 engages slot 57. A sufficient number of such anchoring devices 51 are used to provide adequate attachment of the beams 45, 47 to the supporting joist beam 59. The process is repeated to provide a sufficient number of substantially parallel horizontal beams that together provide a decked area of the desired dimensions. Ordinarily, an anchoring device 51 is used to attach each adjacent pair of horizontal beams comprising the finished deck structure at each point at which the horizontal beams cross a joist beam of the supporting structure.

The use of the anchoring devices to secure the horizontal beams in the manner depicted by Fig. 7 permits a deck structure to be installed without any mechanical fasteners penetrating the exposed, finished top surface of the horizontal beams. The holes and defects created by conventional construction, in which screws, nails, or the like are driven directly through the horizontal beams' surface into the supporting structure are aesthetically undesirable, and are prone to cause injury to the feet of persons walking barefoot on the surface. In addition, the holes or defects frequently will collect water, dirt, and other debris. Conventional wood decking boards are highly likely to have rot initiate at these locations as a result.

DRAWING OBJECTIONS

The Examiner has objected to the drawings entered on February 12, 2009, (i) disputing that Fig. 7 is an accurate cross-sectional view corresponding to what is shown in Figs. 1-3; and (ii) contending that it is unclear what material the cross-hatching of beams 45 and 47 represents, such that there is a question whether cross-sectional or end views are being shown.

For the sake of clarity, the specification has been amended in the Brief Description of the Drawings at pages 26-27 to clarify that Figs. 7 and 8 depict cross-sectional views. The Detailed Description of the Present Invention has been amended to further characterize Figs. 7 and 8. In particular, the paragraph beginning at page 31, line 14 has been amended to indicate that the cross-section presented in FIG. 7 is taken in a plane generally perpendicular to the long direction of horizontal beams (decking boards) 45 and 47 and generally parallel to the sides of joist beam 59. Accordingly, horizontal beams 45 and 47, joist beam 59, and anchoring device 51 are all depicted in cross-sectional view. Because beams 45 and 47 run generally perpendicular to joist 59 in a typical decking installation, the cross-section in Fig. 7 cuts beams 45 and 47 across end grain, while joist 59 is cut along side grain. Applicant respectfully notes that the terms “end grain” and “side grain” are understood with reference to decking systems in which the decking boards and joist are all made of ordinary wood. It is further noted that other materials are also suitable for the decking boards of the invention, e.g. materials selected from the group consisting of synthetic polymers, at least partially foamed synthetic polymer, wood, wood composite, and combinations thereof recited by

claim 37. Despite the lack of actual microstructural wood grain in some of these materials, a skilled person would nonetheless understand the reference to “grain” in terms of the relative dimensions of non-wood decking boards.

The specification description of Figs. 7-8 has also been amended to include reference to the upper portion 61 and the lower portion 63 of the sides of decking boards 45, as depicted by Fig. 8.

In view of the amendment of Fig. 7, the amendments of the specification, and the remarks set forth above, it is submitted that any lack of clarity of the drawings has been obviated, and that the drawings properly disclose all structural details essential for a proper understanding of the invention, when viewed in light of the specification as a whole.

Reconsideration and withdrawal of the objection under 37 CFR 1.83(a) to the drawings is respectfully requested.

The Examiner has also raised an objection to the disclosure of the specification, in reference to the description of Figs. 7-8, on grounds corresponding to those set forth above regarding the figures themselves. It is respectfully submitted that the amendment of the specification and the amendment of the drawings discussed above obviates the basis for the objection to the specification as well.

Reconsideration of the objection to the disclosure is thus respectfully requested.

REJECTIONS UNDER 35 USC 112

Claims 33-38 were rejected under 35 U.S.C. §112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of the elements. In particular, the Examiner has stated that the claim [i.e., claim 33] sets forth a decking system, yet he alleges that the claim [33] merely recites a listing of parts without any interaction that would recite cooperative relationships providing for the joinder of the anchoring device and the decking boards.

Applicant respectfully disagrees with the Examiner's reading of MPEP 2172.01, based on the legal precedent of *In re Venezia*, 530 F.2d 956, 958-59; 189 USPQ 149, 151-52 (C.C.P.A. 1976). It is submitted that even though claim 33 does not expressly require the joinder of the recited decking boards and support board, the structural relationship between these elements in the assembled configuration is nonetheless clear, based on the express requirements that each deck board include a "groove adapted to receive an anchoring device."

However, in order to expedite prosecution, claim 33 has been amended to recite the attachment of two decking boards to a support board using the anchoring device. The decking boards are situated atop the support board. The side portions of the horizontal top element of the anchoring device engage the grooves in the sides of the respective decking boards, and a metal fastener is driven through to the anchoring device to the support board, whereby the decking boards and the support board are joined.

It is respectfully submitted that the cooperative relationship among the decking boards, the support board, the anchoring device, and the metal fastener is

thereby made explicit in claim 33, as amended, obviating any incompleteness of claim 33.

As best understood by applicant, the foregoing rejection of claims 34-38 under 35 USC 112, second paragraph, arose solely from the alleged defect inherited from claim 33. No separate grounds were adduced as to claims 34-38. Consequently, applicant submits that the amendment of claim 33 cures the infirmity, if any, of claims 34-38.

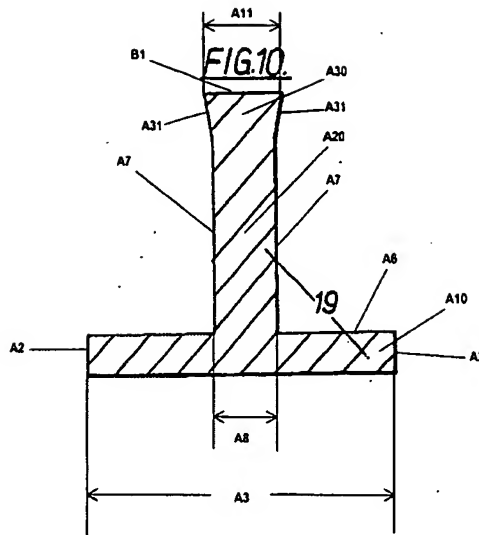
In view of the amendment of claim 33 and the foregoing remarks, it is respectfully submitted that claim 33 (and claims 34-38 dependent thereon), is complete and satisfies the requirements of 35 USC 112.

Accordingly reconsideration of the rejection of claims 33-38 as being incomplete and therefore failing to comply with the requirements of 35 USC 112, second paragraph, is respectfully requested.

REJECTIONS UNDER 35 USC 102

Claims 29, 31, and 32 were rejected under 35 U.S.C. §102(b) as being anticipated by Great Britain Patent GB 1,350,754 to Child (“the British patent”).

For reference, a copy of Figure 10 of the British patent, including markings added by the Examiner, is reproduced below.



(GB 1,350,754, as annotated by the Examiner)

The British patent relates to the mounting of ceramic tiles on walls and similar substantially upright surfaces, and on floors and similar horizontal surfaces. No disclosure or suggestion is provided that would extend the teaching beyond this limited class of materials. The tiles are secured in position by a fixative preparation coated on the back surfaces of the tiles that adheres them to an underlying surface. In a conventional installation process, the fixative is allowed to attain strength, and thereafter a grouting medium is fed into the joints between adjacent tiles to fill up the joint spaces and provide a satisfactory finished appearance to the tiled surface.

Thus, the invention delineated by the British patent is said to “consist in a single square or oblong tile for mounting in position...and having already affixed to it before being so mounted a preformed grouting strip along one or two edges only of the tile and visible from the face of the tile, the arrangement being such that when the tile

with the grouting strip or strips affixed to it is mounted in position the grouping strips serve to space adjacent tiles apart by a predetermined distance.” Page 1, lines 39-50, emphasis added. Significantly, the British patent relates exclusively to either glazed or nonglazed ceramic tiles. Page 1, col. 1, lines 10-12. Nothing in the specification or claims discloses or suggests that the patent’s grouting strips have any application or utility for other materials, such as wood.

Referring to the supplemental designations he provided, the Examiner provided the following basis for his rejection of claim 29:

Regarding claim 29, the British patent discloses, in Figure 10, an anchoring device consisting essentially of a substantially flat horizontal top element A10, at least one substantially vertical support member A20, and a substantially flat horizontal bottom element A30. The top element A10 has a top view configuration including two sides A2 and a predetermined first width A3 as measured side to side. The first width A3 is measured at a maximum width between the sides A2. The top element A10 has an imaginary center line A4. The support member A20 is attached to an underside A6 of the top element A10 along the center line A4¹ and the support member A20 extends downwardly therefrom. The support member A20 has two sides A7 and a predetermined second width A8 as measured side to side at a maximum width. The bottom element A30 has a flat bottom view configuration, which includes sides A31 and having a generally trapezoidal shape, and a predetermined third width A11 as measured side to side at a maximum width at a trapezoidal base B1. The first width A3 is greater than the second width A8 and the third width A11. The third width A11 is greater than the second width A8. The device is made of molded plastic material (column 4, lines 72-84).

Applicant respectfully traverses the Examiner’s contention that the British patent discloses every structural feature of the anchoring device delineated by claim 29, as would be required for a proper rejection under 35 USC §102(b).

¹ *Sic* – Applicant is unable to locate any designation of A4 in the Examiner’s annotations of Fig. 10 of the British patent.

More specifically, applicant maintains that a person having ordinary skill would not regard the British patent as having disclosed any anchoring device, let alone applicant's anchoring device, within the meaning of that term as used in the instant application. The British patent does not use the nomenclature "anchoring device," or any other term that a skilled person would regard as comparable. Instead, as set forth above, the allegedly anticipatory article of the British patent, e.g. as depicted by Fig. 10 thereof, is specifically denominated a "preformed grouting strip." The function of this strip is said to be spacing the tiles apart by a predetermined distance. See col. 2, lines 46-50. There is no disclosure or suggestion that the strip plays any role in anchoring the ceramic tiles with which it is associated to a wall or floor surface, or even that the grouting strip could be used in such a manner. Instead, that anchoring function is separately provided by a fixative disposed between the back surface of the tiles and the surface (e.g. wall or subfloor) to which the tile is applied. See, e.g., page 1, col. 1, lines 17-21 and page 2, col. 2, lines 89-91. Applicant therefore maintains that there is no basis on which the Examiner could reasonably assert that any "anchoring device," let alone applicant's particular device, is disclosed.

While applicant agrees that a statement of intended use is not *per se* a structural limitation, he still maintains that a prior art disclosure must be read as a whole, such that functional language that characterizes what a disclosed article must accomplish may, as in this instance, provide definite structural limitations of the article.

Thus, applicant's anchoring device is structurally distinguished from the preformed grouting strip of the British patent. Such a strip inherently must be sufficiently elongated to extend at least over substantially the full edge length of each

tile. Were it not of such length, it would be incapable of performing its grouting function. “Grout” is pertinently defined as “A fluid mixture of cement, sand, and water.” *McGraw Hill Dictionary of Scientific and Technical Terms, Sixth Edition*, at 938 (2003). The skilled person would thus understand by extension that a “grouting strip” is a strip performing the same function as the particular cementitious material historically used as “grout,” i.e. to seal a joint between adjacent pieces of tile or the like. Use of a “grouting strip” in connection with a decking system would prevent the proper drainage of water from the deck in the customary installation in which decking is exposed to the elements.

On the other hand, a person having ordinary skill in the art of deck construction would recognize that applicant’s anchoring device would not be formed with a length corresponding to the full length of each decking board or even a substantial fraction thereof. Were it to be formed with such a length, it would not function properly for its intended use. Decking is typically installed in a location that exposes it to the elements, including rain, snow, and other sources of water. The individual decking boards are installed with intervening gaps, through which accumulated precipitation or other moisture and debris may drain. An anchoring device of extended length would effectively seal the space between adjacent decking boards, thereby preventing this drainage.

The Examiner has countered the foregoing argument as follows:

Applicant further argues that the strips of Child have different structure than applicant’s decking board anchoring device. In response, this might be so. However, it is not the structure that is different about Child but rather what is Child lacking so that the reference does not anticipate the claim.

(Office Action at 14).

Applicant specifically traverses this statement as being an improper statement of the law of anticipation of 35 USC 102. To the contrary, applicant respectfully maintains that it is settled law that anticipation requires that a prior reference disclose of every feature arranged as set forth in the claim. (“We thus hold that unless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102. *Net Moneyin, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008)). Applicant thus maintains that the Examiner’s own statement, “This might be so,” is a prima facie admission that the features of applicant’s claims are not dispositively disclosed in the reference applied, either expressly or implicitly. precluding the anticipation rejection issued.

In the present instance, applicant respectfully maintains that a person of ordinary skill in the art would regard the Child grouting strips as necessarily having an extended length that would preclude its use as applicant’s decking board anchoring device. Such a difference would necessarily preclude any anticipation rejection, since any grouting strip produced in accordance with the British patent would necessarily have a structure different from that required by applicant’s claims for his anchoring device.

Applicant further points to *Motorola, Inc. v. Interdigital Tech. Corp.*, in which the Federal Circuit established boundaries governing anticipatory prior art:

For a prior art reference to anticipate a claim, the reference must disclose each and every element of the claim with sufficient clarity to prove its existence in the prior art. See *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990) (“[T]he [prior art] reference must describe the applicant’s claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it.” (citations omitted)). Although this disclosure requirement presupposes the knowledge of one skilled in the art of the claimed invention, that presumed knowledge does not grant a license to read into the prior art reference teachings that are not there.” 121 F.3d 1461, 43 USPQ2d 1481, 1490 (Fed. Cir. 1997) (emphasis added)

See also *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991), in which the Federal Circuit held that “There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention” (emphasis added). Applicant respectfully submits that the foregoing remarks clearly establish the existence of structural differences of the very sort that the *Scripps* court envisioned. In addition, the attempt to cast the grouting strips of the British patent as being anchoring strips equally violates the *Motorola* court’s prohibition against reading subject matter into the reference that is not fairly disclosed therein.

Applicant further submits that the preformed grouting material strip of the British patent and the anchoring device are properly distinguished under the standard articulated in *Union Oil Co. of Cal. v. Atlantic Richfield et al.*, 208 F.3d 989, 994, 54 USPQ2d 1227 (Fed. Cir. 2000) (holding that a claim reciting, in its preamble, “An unleaded gasoline suitable for combustion in an automotive engine” covered a fuel that would regularly be used in autos, not that conceivably could be, thereby excluding from

claim scope a broader class of petroleum formulations such as aviation fuels or racing fuels).

In the present instance, it is respectfully submitted that the preformed grouting material strip of the British patent and the anchoring device of claim 29 would be regarded by a person having ordinary skill in the art as having material structural differences inherent in their different functions, implicating the *Union Oil* standard. On the other hand, the Examiner's contention that the preformed grout material strip can be identified as an anchoring device contravenes these standards.

At page 6, the Examiner has also discounted applicant's claim recitation with respect to the terminology "adapted to," stating the following:

Applicant is reminded that the anchoring device can be adapted to main /sic/ the top element in a predetermined position during use for joinder of two adjacent boards which have been pre-cut with receiving slots, and to position the bottom element upon a support board which two adjacent boards rest for attachment of the anchoring device to the support board for anchoring and support of the two adjacent boards.

While applicant agrees that a mere recitation of intended use cannot by itself convey patentability, he maintains that the courts have definitively recognized use of the formula "adapted to" as viable way of reciting structural features. *In re Schreiber*, 128 F.3d 1473, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997), quoting *In re Swinehart*, 439 F.2d 210, 212, 169 USPQ 226, 228 (CCPA 1971) ("[T]here is nothing intrinsically wrong with [defining something by what it does rather than what it is] in drafting patent claims."). Moreover, applicant respectfully submits that the foregoing Examiner's statement amounts to nothing more than a reiteration of applicant's own claim, without any basis to

substantiate any contention that the British patent discloses any device that is actually capable of carrying out the function recited by applicant's claims.

Applicant maintains that the foregoing functional limitations in fact positively recite further structural limitations that distinguish the anchoring device of claim 29 from any article disclosed or suggested by the British patent. There is no disclosure whatsoever in the British patent that "top"² element A10 is intended to be received into any groove of a tile or other article. To the contrary, the British patent universally teaches that element A10 is to be installed below the tiles and that the Fig. 10 strip is used with plain-edged tiles, whereas other configurations of grouting strips (e.g. strip 16 with interlocking, ear-like projections 16a) are to be used with grooved tiles. See, e.g., page 2, col. 1, lines 40-42 and Figs. 9-10; compare page 2, col. lines 28-32 and Figs. 4-6. Accordingly, applicant respectfully submits that a fair reading of the British patent contradicts the Examiner's proposition that width A8 of top element A10 is intended to be shaped and dimensioned so as to permit it to be received in a groove of any tile or other article. Significantly, Fig. 10, which the Examiner has cited, is said to be of a T-section strip appointed for use with a plain-edge tile, i.e., a tile lacking any edge groove or other like feature corresponding to the receiving slots delineated by claims 29 and 33. Page 2, col. 1, lines 11-13 and 40-43. Horizontal projections A2 of "top element" A10 are not received in any slot. Instead, element A10 is installed with its horizontal projection A2 underneath the back surface of each tile,

² Applicant reiterates that what the Examiner has annotated as element A10 is never called a top element in the British patent, and that element A10 is depicted as the bottom portion of the strip shown in Fig. 10. The "top" nomenclature is purely a designation bestowed by the Examiner. .

and with the plain edge of each tile abutting sections A7 and A31 on each side of grouting strip 19.

The extended length of the British patent's grouting strip is apparent from Fig. 9, in which the same grouting strip 19 also depicted in Fig. 10 is seen to extend fully around two sides of tile 17. Clearly, the grouting strip must fill the gaps between adjacent tiles in their entirety for the grouting function to be carried out. *See also* page 2, col. 1, lines 40-43.

Although not specifically referenced by the Examiner, other tile forms disclosed by the British patent have recesses that are not grooves, but instead extend through the back surface of the tile and permit an interlocking connection. See, e.g., Figs. 7-8, showing recesses 17b appointed to receive ear-like or bead-like projections 18a from a grouting strip 18. On the other hand, there is no disclosure of any tile or the like having a pre-cut receiving slot, as recited by claims 29 and 33. Applicant thus maintains that the Examiner has improperly read into the British patent features that are not fairly disclosed therein. Specifically it is submitted that he has read into the British patent the particular shape and dimensions of features of applicant's anchoring device. These features, which are delineated by claims 29 and 33 using "adapted to" terminology, render the anchoring device capable of carrying out the disclosed anchoring function, and thus represent a distinction predicated patentability. Absent a showing that the British patent discloses any embodiment that necessarily features every limitation of applicant's claims, an anticipation rejection is precluded.

Claims 31 and 32 were also rejected. Applicant respectfully submits that these claims are not anticipated by the Child British patent for at least the same reasons as claim 29, from which they depend. Further with respect to these claims, the Examiner has pointed to sides A2 of top element A10 as allegedly being symmetric and parallel relative to one another. While applicant does not disagree with these assertions taken in isolation, he maintains that any such finding falls far short of the totality of the claim requirements delineated respectively by claims 31 and 32 and base claim 29. Applicant thus maintains that the foregoing statements, even if correct, does not cure the failure of the Child reference to disclose or suggest the subject matter of claim 29.

In view of the foregoing remarks, it is submitted that present claims 29, 31, and 32 patentably define over the British patent. Accordingly, reversal of the rejection of claims 29, 31, and 32 under 35 USC §102(b) over the British patent is respectfully requested.

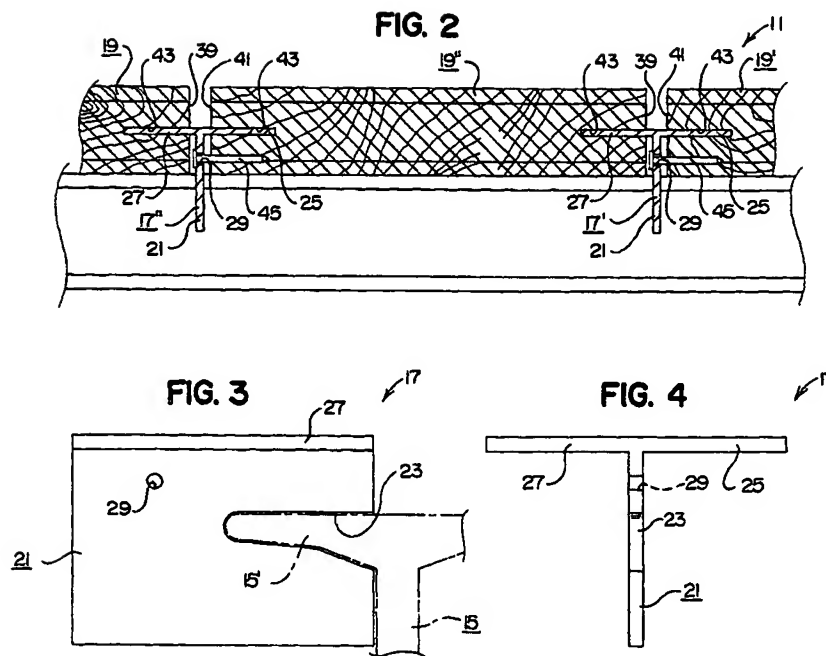
REJECTIONS UNDER 35 USC 103(a)

Claim 30 was rejected under 35 U.S.C. §103(a) as being unpatentable over Child (“the British patent”) in view of US Patent 4,154,172 to Curtis, Jr., which provides a system for attaching floor decking to a railroad car having an open floor structure of flanged beam members.

Applicant respectfully submits that the addition of Curtis, Jr. fails to cure the British patent’s lack of disclosure or suggestion of the anchoring device of base claim 29, from which claim 30 depends. For example, applicant maintains that nothing

in Curtis, Jr. overcomes the British patent's disclosure of the linear and transverse dimensioning that distinguishes a preformed grouting strip from applicant's anchoring device of claim 29. The Examiner has not pointed to any disclosure or suggestion in Curtis, Jr., to the contrary, or any basis on which to conclude that a skilled person would be motivated, in light of Curtis, Jr. or other prior art, to carry out the substantial reconstruction of the British patent's device needed to reach the subject matter of claim 29, let alone dependent claim 30.

As depicted by FIGS. 2-4 (reproduced below for convenience), Curtis provides a fastening member 17 that includes side-projecting top portions 25, 27 that engage complementary grooves 43 in the sides of plank member 19. Fastening member 17 also includes a slot 23 configured to engage one side of the top portion of I-beam 15. Slot 23 is necessarily perpendicular to the direction in which portions 25, 27 extend. Fastening member 17 is preferably constructed of metal, such as 1/8" steel.



The Examiner has stated that Curtis, Jr., teaches in Figs. 2 and 4, a support column 17', 21 having recesses to allow the insertion of a fastener therethrough. He then asserts that it would have been obvious to include recesses on the vertical support member of Child to allow insertion of a fastener, thereby creating support columns between the recesses.

Applicant respectfully traverses the identification of items 17' and 21 of Curtis, Jr., as being, or even having, support columns. The Curtis specification calls items 17' and 21 a "fastening member" and a "vertical platelike body portion of a fastening member," respectively. *See* col. 2, lines 59 and 20. As seen in Fig. 3 of Curtis, there is a small hole 29 through the vertical portion of members 17 or 17'. Hole 29 is necessarily small to carry out its intended function, i.e., to permit a nail to be driven generally horizontally, through the fastener and into the adjacent decking board,

whereas applicant's fastener is attached by a fastener driven into the supporting joist below the decking board.

While the Examiner has alleged that the difference between applicant's "support columns" and Curtis's "fastening member" is only semantic, and thus not conveying patentable distinction, applicant maintains that item 17' cannot be construed as a support column, because the Curtis device lacks any structure that could be regarded as functioning as a base. On the other hand, applicant's support column clearly connects the top and bottom elements of the anchoring device.

Of further significance, the only material disclosed by Curtis for his fastening member is steel (e.g., 1/8" steel, col. 2, line 34), and clearly not the plastic required by claim 29, on which claim 30 depends.

Applicant respectfully submits that a person having ordinary skill in the art would in no way regard a small hole, such as hole 29, as creating a columnar structure in the Curtis device. Were the dimensions of aperture 29 in Curtis's device markedly enlarged, the aperture/hole would no longer carry out its intended function, i.e. receiving nail 49, precluding the Examiner's proposed reconstruction under *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

Still further, applicant maintains that the fastening member of Curtis operates in a different manner than the device of applicant's claims 29 and 30. Element (c) of claim 29 delineates a substantially flat horizontal bottom element having a flat bottom view configuration. It is further required that the anchoring device is configured in a manner such that the bottom element is "position[ed] upon a support board." By way of contrast, the bottom of the Curtis device is not positioned "upon" a

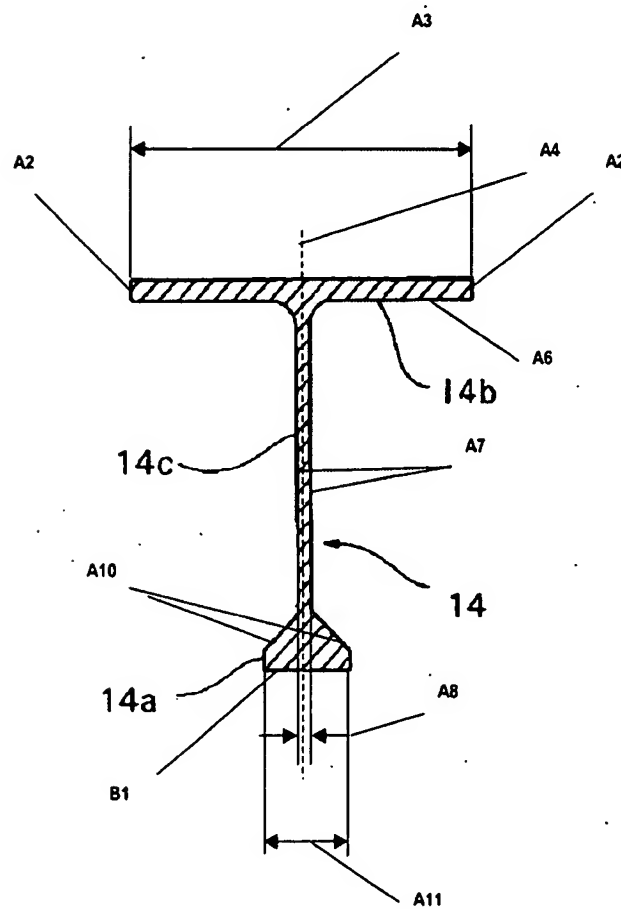
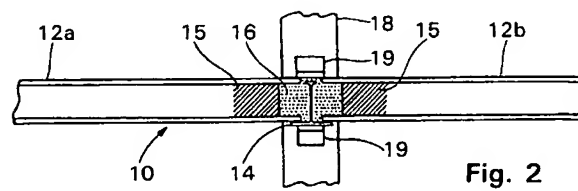
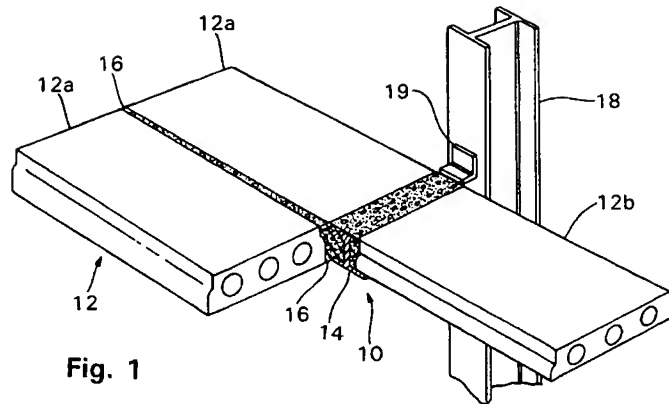
support. Rather, as depicted most clearly by Curtis's Fig. 3, the device 17 includes within its vertical portion 21 a generally horizontally directed slot 23 that engages the support (i.e., the top flange 15' of an I-beam 15). *See, e.g.*, col. 2, lines 19-35 generally.

Based on the foregoing, applicant respectfully submits that the Examiner's alleged motivation for modifying the Child structure in light of Curtis is unavailing, because it would motivate only the inclusion of a small, horizontal hole to accept a fastener, but would not motivate the creation of the columnar structure recited by claims 30 and 34, which would defeat the purpose of Curtis's small fastener hole.

In view of the foregoing remarks, it is submitted that present claim 30 patentably defines over the British patent and Curtis, Jr. Accordingly, reconsideration of the rejection of claim 30 under 35 USC §103(a) as being unpatentable over the British patent and Curtis, Jr., is respectfully requested.

Claim 29 was rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 5,704,181 to Fisher et al. in view of US Patent 6,012,256 to Aschheim.

Fisher et al. discloses a structural framing system and associated method for the construction thereof. The framing system is readily visualized in the depictions of Figs. 1-2 of Fisher et al., which are reproduced below for reference. Also reproduced is a version of Fig. 3 as marked up by the Examiner.



With reference to Figs. 1-2 and Fig. 3, there is depicted specially configured dissymmetric steel beam 14, which is horizontally disposed and supported between adjacent vertical columns 18 erected on conventional foundations. Framing system 10 further comprises a series of concrete plank sections 12 installed in successive pairs 12a, 12b and joined together along either side of beam 14 using a high-strength grout material 16. Col. 2, lines 46-62. Plank sections 12 are said to be of conventional precast and prestressed, hollow core concrete construction. They are intended to have a substantially uniform thickness ranging from 6 to 12 inches, and span between adjacent structural steel vertical columns 18. Col. 2, lines 63-67. The construction assembly is said to involve first the placement and anchoring of beam 14 in a substantially horizontal position between adjacent vertical columns 18 supported upon, and connected to, seats 19 using conventional structural connection means. Col. 3, lines 36-39. Then the plank sections are placed onto the bottom flange of beam 14, on which they rest. Lines 42-55. The use of a high strength grout 16 is a further required component of the structural system. The grout is premixed and injected so that it completely fills the cavity and totally encases the dissymmetric beam 14. Lines 61-64. Significantly, no flange of beam 14 is received in any groove of the plank sections it supports.

Attention is drawn to the characterization of the Fisher et al. beam 14 as being a “specially-configured steel dissymmetric beam” (col. 2, lines 52-53). Applicant submits that the foregoing “special configuration” refers, *inter alia*, to the particular dimensioning required to permit the beam 14 to carry out its appointed functions. Specifically, beam 14 is used to support massive concrete planks 12, thereby imposing

definite requirements of dimension and strength. Lower flange 14b must be sufficiently wide and thick to permit it to support concrete planks 12a and 12b, which rest upon it, both during the assembly and subsequent to the placement of grouting material 16. Lower flange 14b must also permit the flange to be placed on seats 19, to which flange 14 is connected “using conventional means for making the structural connection thereto” (col. 3, lines 36-38).

Claim 29 was rejected on the following basis:

Regarding claim 29, Fisher et al. disclose, in Figure 3, an anchoring device comprising a substantially flat horizontal top element 14b, at least one substantially vertical support member 14c, and a substantially flat horizontal bottom element 14a. The top element 14b has a top view configuration including two sides A2 and a predetermined first width A3 as measured side to side. The first width A3 is measured at a maximum width between the sides A2. The top element 14b has an imaginary center line A4. The support member 14c is attached to an underside A6 of the top element 14b along the center line A4 and the support member 14c extends downwardly therefrom. The support member 14c has two sides A7 and a predetermined second width A8 as measured side to side at a maximum width. The bottom element 14a has a flat bottom view configuration which includes sides A10 and having a generally trapezoidal shape, and a predetermined third width A11 as measured side to side at a maximum width at a trapezoidal base B1. The first width A3 is greater than the second width AS and the third width A11. The third width A11 is greater than the second width A8.

The Examiner has acknowledged that Fisher et al. fails to disclose a device made of molded plastic material, and has therefore combined Aschheim, which is directed to a structure and method for resisting episodic loads, such as those occurring during an earthquake.

The Examiner has relied on disclosure at col. 6, lines 2-13 of Fisher et al. for motivation to use a different material. The pertinent disclosure reads as follows:

It is therefore to be understood that various changes in the details, materials, steps, and arrangement parts, which have been described and illustrated to explain the nature of the present invention, may be made

by those skilled in the art within the principles and scope of the invention as expressed in the appended claims.

Applicant respectfully submits that the foregoing rejection is insufficient to predicate an obviousness rejection, even with the addition of Aschheim.

Applicant maintains that there is no disclosure or suggestion in Fisher et al. of any device having the construction, including the dimensions or functionality, of the anchoring device of claim 29. In particular, the Fisher et al. dissymmetric steel beam is not sized to permit it to maintain the top element in a predetermined position during use for joinder of two adjacent boards which have been pre-cut with receiving slots, and to position the bottom element upon a support board which the two adjacent boards rest for attachment of the anchoring device to the support board for anchoring and support of the two adjacent boards. As would be recognized by a person having ordinary skill in the construction arts, decking boards of the type employed in the present invention most commonly have a thickness ranging from about 0.5 to 2 inches thick, whereas the concrete planks employed in the Fisher et al. construction are said to have a substantially uniform thickness which may range from about 6 to 12 inches. Col. 2, line 67 to col. 3, line 1. Put simply, Fisher's planks are vastly larger and heavier. Moreover, nothing in the construction of the dissymmetric structural steel beam 14 of Fisher et al. adapts it to be maintained in the predetermined position recited by claim 29, nor is it appointed for use with adjacent boards which have been pre-cut with receiving slots. The concrete planks 12a, 12b have no such receiving slots or, indeed, slots of any form. Instead, the dissymmetric structural steel beam 14 must be

used in conjunction with high-strength grout 16, whereas applicant's decking system employs no such grout.

The present Office Action refers to the marked-up version of Fig. 3 of Fisher et al. included in a previous Office Action. Significantly, that version of Fig. 3 is depicted in an orientation that has been inverted with respect to Fig. 3 as it was originally presented in Fisher et al. The original orientation of Fig. 3 places the largest width of beam 14 (denoted as A3 by the Examiner) on the bottom, corresponding to its disposition in the finished construction shown in Figs. 1 and 2. By way of contrast, and without notice, the Examiner has placed the largest width (i.e. the width of flange 14b) on the top of the altered drawing. Applicant maintains that "top" and "bottom" as used in both Fisher et al. and the instant specification are terms of ordinary language. They have not been imbued with any special technical meaning by applicant or by any of the prior art references applied, including Fisher et al. It is submitted that the Examiner's alteration is repugnant to ordinary meaning and thus impermissible, absent clear evidence to substantiate the change.

Applicant particularly traverses the Examiner's assertion that "The terms 'top' and 'bottom' are merely relative terms." (Office Action at 16.) The distinction between "top" and "bottom" is not a matter of mere semantics, because the "bottom" of Fisher et al.'s dissymmetric structural steel beam 14 is defined by the direction of gravity and the beam's function of supporting planks 12a, 12b. Likewise, the "top" and "bottom" of applicant's anchoring device are distinguished by manner in which decks are installed, with decking boards on "top" of support boards. The Examiner has repeatedly referred to Fig. 3 of Fisher et al., which he has modified by presenting it

inverted from its original orientation, without acknowledgment. Applicant respectfully maintains that were the figure correctly presented, the lack of motivation to carry out the reconstruction required to obtain applicant's device would be readily apparent, because "top" and "bottom" indeed matter if the modification would require re-dimensioning both portions so as to properly carry out applicant's anchoring function.

The Examiner's assertion that "the rejected claims has [sic] no mention of gravity" (page 16) is untenable in light of the claim language, which does call for the adjacent deck boards to "rest" on the support board, clearly contemplating the operation of ordinary gravity. *See* claims 29, 33.

It is further clear that the inversion of beam 14 in an actual building structure employing the construction depicted by Figs. 1 and 2 of Fisher et al. would have disastrous consequences. Were the Fisher et al. beam installed in the inverted position, it inherently could not support the concrete planks, which would have to rest on an angled surface of the trapezoidal "bottom," not on a flat surface. Clearly, no skilled artisan would contemplate such a configuration. The Fisher et al. reference does not disclose or suggest any function for dissymmetric structural steel beam 14 used in the inverted position implied by the Examiner's recasting of Fig. 3.

In response, the Examiner has contended that orientation cannot confer patentability. However, applicant maintains that the Examiner's reconstruction of Fisher et al.'s device involves far more than merely inverting the device actually taught. Instead, the disclosed orientation of the Fisher device does matter, inasmuch as it bears directly on the dimensional modifications required to reach applicant's device and whether a skilled person would have motivation for such modification.

The Examiner has cited the generic statement of Fisher et al. at col. 6, lines 2-13, in support of his proposition that a skilled person would contemplate making the disclosed beam of plastic instead of concrete. Applicant respectfully maintains this assertion flies in the face of repeated disclosure that the beam is a steel beam. No suggestion to the contrary or other specific material alternative is anywhere present in Fisher et al.

Rather, applicant maintains that a person of ordinary skill in the art would indubitably recognize the impossibility of substituting any known plastic for structural steel in the Fisher et al. dissymmetric beam. No plastic structure would conceivably have sufficient strength for it to support 6 – 12 inch thick concrete planks. The Examiner has not pointed to any reasonable motivation for a skilled worker, even in light of Aschheim, to change the Fisher et al. material, apart from hindsight afforded by the present application.

Aschheim discloses a “sustainer,” which the Examiner has equated with applicant’s anchoring device. (Office Action at page 9, line 1.) Applicant respectfully traverses this indication as being contrary to Aschheim’s definition of a “sustainer” as including any member “that resists transverse loading such as a joist, a beam, a girder, or a column.” Col. 6, lines 58-60. Applicant’s anchoring device clearly cannot be equated with Aschheim’s sustainer, since it does not accomplish the same function. Applicant further submits that Aschheim’s very generic disclosure that sustainers could be made of many different materials (col. 1, lines 23-27) must be read in light of the function to be fulfilled by that sustainer in widely varying structures. Col. 1, lines 15-18. Applicant maintains that even if a plastic sustainer might be appropriate in certain

of the Aschheim structures, a skilled person would not be motivated to construct any support beam of the type disclosed by Fisher et al. for concrete construction using plastic, since the Fisher et al. beam would be rendered inoperative for its intended function. *In re Gordon, supra*. Furthermore, the reconstruction proposed by the Examiner would require elimination of the critical grouting taught by Fisher et al. Applicant's decking system would be unworkable if installed with grouting in the manner taught by Fisher et al., because the gaps between decking boards that permit collected water to drain would thereby be sealed, again precluding the Examiner's proposal under *Gordon*.

See also *In re Gal*, 980 F.2d 717, 25 USPQ2d 1076 (Fed. Cir. 1992) wherein a finding of "obvious design choice" was precluded where the claimed structure and the function it performed were different from the prior art. Applicant submits that the anchoring function of the present plastic anchoring device and the support function of the Fisher et al. dissymmetric steel beam are sufficiently different to invoke the *Gal* rule, negating any finding that the substitution is an "obvious design choice."

It is respectfully submitted that the Examiner has not provided any motivation to re-dimension the Fisher et al. dissymmetric steel beam so that it could carry out the function of supporting the decking structure in the configuration delineated by claim 29, apart from the hindsight of the present specification and claims. The need for such a substantial reconstruction is submitted to negate any finding of obviousness. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (C.C.P.A. 1959).

Still further, applicant maintains that Fisher et al. is not analogous art, and thus is not properly applied against applicant's claims. Fisher et al. is directed

specifically to techniques for construction using precast concrete planks with a steel supporting structure, whereas applicant's claims relate to construction using wood and wood-like decking boards and supporting framing. Applicant respectfully submits that these construction forms, materials, and techniques are so disparate that a skilled artisan would not be motivated to consider the Fisher et al. disclosure as pertinent to the particular problems of attaching decking boards to supporting beams of the type delineated by claims 29-38.

The Examiner's attempt to associate Fisher et al. with a "play house" (page 8, penultimate line) is respectfully submitted to be pure hindsight, as the term "play house" does not appear in Fisher et al. and applicant is unaware of any "play house" constructed with concrete deck planks. On the other hand, if the Examiner is attempting to take official notice of a concrete play house, he is respectfully requested to provide an affidavit of such in accordance with MPEP 2144.03(C) and 37 C.F.R. § 1.104 (d)(2),

Accordingly, it is submitted that Fisher et al. is not properly considered to be analogous art.

The Examiner's appeal to Aschheim's disclosure of plastic as a possible material for his sustainer is submitted to be unavailing. Aschheim's sustainer is appointed for many uses other than supporting precast concrete planks. While plastic might be suitable for his sustainer in some applications, it clearly would not be for concrete construction like Fisher's. Thus, a skilled person, even if motivated *arguendo* to combine Aschheim with Fisher et al., would still have no motivation to employ a

plastic sustainer, but would select material compatible with the requirements of concrete.

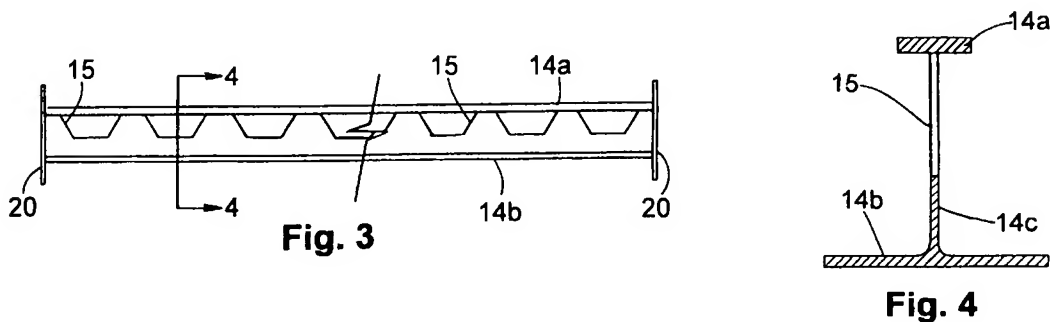
In view of the foregoing remarks, it is submitted that present claim 29 patentably defines over Fisher et al. and Aschheim. Accordingly, reconsideration of the rejection of claim 29 under 35 USC §103(a) as being unpatentable over Fisher et al. and Aschheim is respectfully requested.

The Examiner has rejected claim 30 under 35 U.S.C. §103(a) as being unpatentable over Fisher et al. in view of Aschheim et al. and further in view of US Patent 6,442,908 to Naccarato et al. on the following basis:

Regarding claim 30, Fisher et al., as modified above, fail [to] disclose the vertical support member 14c having recesses with support columns located therebetween. Naccarato et al. teach, in Figs. 4 and 5, a vertical support member 14c having recesses 15 to promote optimal flow of grout material through the support member (col. 5, lines 29-35). Therefore, as taught by Naccarato et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to include recesses in the vertical support member to promote optimal flow of grout material through the support member. Applicant is reminded that columns will be inherently located between the recesses as shown in Figure 3 of Naccarato et al.

Applicants respectfully note that the same three inventors are named in the Fisher et al. and Naccarato et al. patents, with only the ordering of the three names being different. In addition, Naccarato et al. delineates an overall structural framing system and method that are substantially similar to those of the Fisher et al. disclosure, as is apparent from a comparison of the respective Figs. 1-2 of each patent. Both Fisher et al. and Naccarato et al. disclose a dissymmetric steel beam having generally similar configuration and dimensions. Whereas the Fisher et al. beam is of generally solid

construction, the Naccarato et al. beam has plural spaced, rectilinear or curvilinear openings 15. See col. 4, lines 54-56, of Naccarato et al. and also its Figs. 3-4, which are reproduced below for convenience. The openings 15 are said to promote optimal flow of the grout material 16 through and along the beam within the encasement area during construction. Col. 5, lines 31-34. The framing construction and all materials are otherwise similar.



(Naccarato et al., US Patent 6,442,908)

It is respectfully submitted, for the reasons set forth above, that Naccarato et al. does not materially supplement the teaching of Fisher et al. At best, Naccarato et al. discloses perforation of the Fisher et al. dissymmetric steel beam, but it does not otherwise suggest changing its dimensions or basic functioning. The perforation would, if anything, require increasing the thickness of the remaining portions of the dissymmetric steel beam to compensate for material removed. The overall concrete and steel structures taught by the respective patents are virtually identical. Accordingly, it is submitted that even the addition of Naccarato et al. does not cure the lack of

disclosure or suggestion of the anchoring device of claim 29, from which claim 30 depends. Even less does the combination of the references disclose applicant's claimed anchoring device having a plurality of recesses with support columns located therebetween. It is respectfully submitted that the perforated dissymmetric steel beam of Naccarato et al. still does not disclose or suggest the far smaller molded plastic anchoring device of claim 30. For the reasons set forth above in connection with the rejection of claim 29, applicant maintains the Examiner's appeal to Aschheim for use of plastic equally unavailing in the present rejection of claim 30.

Applicant further maintains, for reasons set forth above in connection with the rejection of claim 29, that there is no motivation to modify any structure provided by Fisher et al. to reach the anchoring device of claim 29. It is respectfully maintained that those reasons apply with equal force to establish that there is no motivation to modify even the combination of Fisher et al. and Naccarato et al. to reach the anchoring device of claim 29, or that of claim 30 dependent therefrom.

The Examiner has contended that it would have been obvious to include recesses in the vertical support member to promote optimal flow of grout material through the support member. While Naccarato et al. admittedly discloses that a perforated dissymmetric steel beam permits a better grout flow than the solid beam provided by Fisher et al., applicant respectfully submits that this supposed motivation has no pertinence to the anchoring device of claims 29 and 30. Clearly, no grouting is disclosed or suggested by the present application. The Examiner has not pointed to any other motivation to suggest the use of the present anchoring device in conjunction with grout. To the contrary, the present decking system would be unworkable, were it to be

installed with grouting in the manner taught by Fisher et al. and/or Naccarato et al., because the gaps between decking boards that permit collected water to drain would thereby be sealed.

The reasons set forth above with respect to Fisher et al. as not being analogous art for claim 29 are submitted to apply with equal force to Naccarato et al., which also discloses a concrete plank and steel frame structure completely unlike the decking and support delineated by applicant. Accordingly, it is submitted that neither Fisher et al. nor Naccarato et al. is properly considered art analogous to claim 30, rendering their use in the present obviousness rejection of claim 30 improper.

Accordingly, it is submitted that no motivation for the combination of Fisher et al. and Naccarato et al. in the manner proposed by the Examiner has been provided, nullifying the propriety of the present rejection.

The Examiner has challenged applicant's purported repeated references to the Naccarato device as being "asymmetrical." Applicant respectfully observes that a word search of the previous amendment does not reveal any instance of this term. The Examiner may have misread the term "dissymmetric," which was used several times. It is noted that the term "dissymmetric" is Naccarato's own term. It is used in the patent's title and appears some five times in the abstract, twenty times in the claims, and fifty-three times in the remainder of the specification, generally in the term "dissymmetric beam." The term is similarly used many times in Fisher et al. Applicant can hardly be faulted for adopting a term that both Fisher and Naccarato use in their titles and clearly regard as central to the characterization of their patents. Furthermore, the Examiner has dismissed applicant's arguments concerning the pertinence of Naccarato with the

summary claim that “one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. Office Action at 18. To the contrary, many of the foregoing arguments lie precisely in the inoperability of devices constructed in accordance with the references as combined by the Examiner.

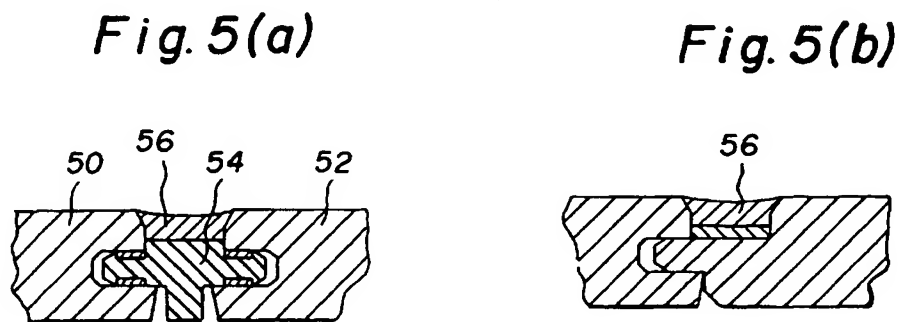
In view of the foregoing remarks, it is submitted that present claim 30 patentably defines over the combination of Fisher et al., Aschheim, and of Naccarato et al. Accordingly, reconsideration of the rejection of claim 30 under 35 USC §103(a) over Fisher et al. in view of Aschheim and further in view of Naccarato et al. is respectfully requested.

Claims 33 and 35-38 were rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 6,363,677 to Chen et al., in view of U.S. Patent 3,045,294 to Livezey, Jr.

Chen et al. is directed to a surface covering system which involves a series of interconnected tiles having a spline system located between the tiles to simulate the appearance of a grout. Each tile is said to have on its sides at least one tongue section and at least two groove sections. When installed, a tongue of one tile engages one of the grooves of an adjacent tile, thereby forming a gap at at least the upper surfaces between the tiles. Two types of splines are used. A first spline, having two tongue sections for interconnecting with the groove section(s) of at least one tile is

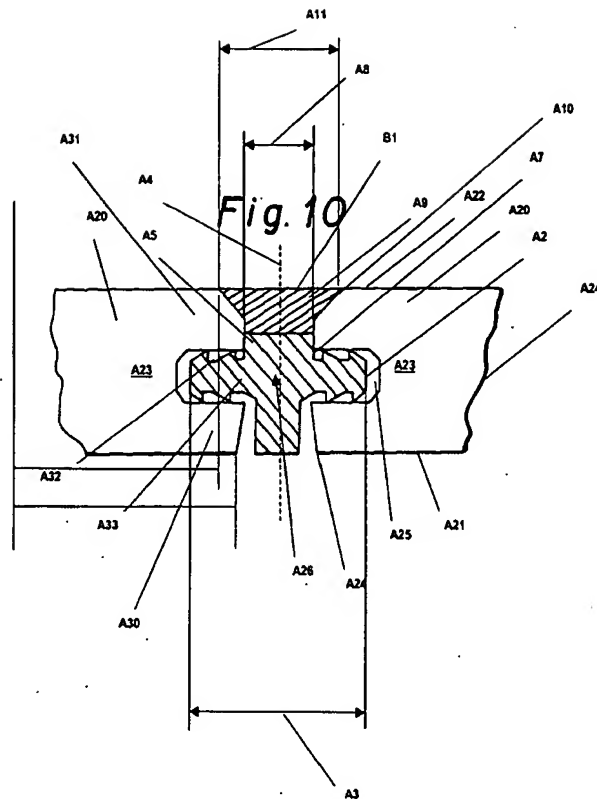
inserted between a series of tiles. A second spline capable of fitting into the gap formed between two or more tiles, which are interconnected at a tongue of a first tile and a groove of a second tile is further used.

The foregoing interconnections are readily visualized with reference to Figs. 5(a) and 5(b) of Chen et al., which are reproduced below for convenience. Fig. 5(a) shows two adjacent tiles 50 and 52 having grooves in facing relationship. First spline 54 has oppositely projecting tongues that engage the corresponding grooves of tiles 50, 52. Second spline 56 fills the gap above first spline 54 which is established by full engagement of first spline 54 with tiles 50 and 52. Fig. 5(b) shows the engagement of the sides of tiles wherein the tongue of one tile mates with the groove of the adjacent tile. On this side, only second spline 56 is used. It fills the gap above the engaged tongue and groove.



(Chen et al., US Patent 6,363,677)

For reference, a copy of Figure 10 of Chen et al., including markings added by the Examiner, is reproduced below.



(Chen et al., US Patent 6,363,677, as annotated by the Examiner)

Claim 33 was rejected on the following basis:

Regarding claim 33, Chen discloses in Figure 5³, a decking system comprising boards A20 and an anchoring device A26. Each of the boards A20 has a top A21, a bottom A22, two sides A23 and two ends A24. At least one groove A25 is located along one of the sides A23. The anchoring device A26 consists essentially of a substantially flat horizontal top element A1,⁴ at least one substantially vertical support member A5, and a substantially flat horizontal bottom element A9. The top element A1 has a top view configuration including two sides A2 and a predetermined first width A3 as measured side to side. The first width A3 is measured at a maximum width between the sides A2. The top element A1 has an imaginary center line A4. The support member A5 is attached to an underside A6 of the top element A1 along the center line A4 and the support member A5 extends downwardly therefrom. The support member A5 has two sides A7 and a predetermined second width A8 as measured side to side at a maximum width. The bottom element A9 has a flat bottom view configuration, which includes sides A10, and having a generally trapezoidal shape, and a predetermined third

³ *Sic* – the Examiner’s annotations, including reference number designations, were made with specific reference to Fig. 10, not Fig. 5.

⁴ *Sic* – the reference designation of A1 does not appear in Fig. 10, as annotated by the Examiner.

width A11 as measured side to side at a maximum width at a trapezoidal base B1. The first width A3 is greater than the second width A8 and the third width A11. The third width A11 is greater than the second width A8. The device is made of molded plastic material capable of having a metal fastener driven through (col. 7, lines 56-60).

The Examiner has acknowledged that Chen et al. fails to disclose a plurality of support boards and decking boards being situated atop support boards. Accordingly, he has pointed to Livezey, which relates to a method and apparatus for laying wooden floors on concrete and similar subfloors. Livezey is said to teach a decking system comprising support boards and decking boards atop the support boards to resiliently support the decking boards and provide a dead air space intermediate a sub-floor and the decking boards.

Applicant respectfully traverses the Examiner's contention that the combination of Chen et al. and Livezey discloses or suggests the decking system delineated by claim 33. Applicant acknowledges, as a general proposition, that decking systems involving decking boards situated atop support boards are conventional. However, any such knowledge falls far short of providing the anchoring device required by applicant's claims. Whether taken singly or collectively, Chen et al. and Livezey clearly fail to disclose or suggest applicant's anchoring device. Rather, the device provided by Chen et al. is clearly distinguished structurally from applicant's form, and there is no suggestion that any structure of Chen et al. should be reconstructed extensively, as required to reach applicant's subject matter, or that a skilled person would have any reasonable expectation of success in carrying out such a modification.

Significantly, the Examiner has not pointed to any single, unitary structure that embodies the anchoring device included in the system of claim 33. Rather, the Examiner apparently has alleged that the combination of elements designated as first and second spline sections 54, 56 in Figs. 4(a) and 5(a) of Chen et al. constitutes such an anchoring device. As disclosed at col. 3, line 66 to col. 4, line 2, and confirmed by Figs. 5(a) and 10, these sections are clearly separate items, pictorially differentiated in the figures by distinct hatching. Importantly, second spline section 56 is usable independent of first section 54, e.g. in the Fig. 5(b) configuration. It is submitted that the Chen et al. disclosure that spline sections 54 and 56 optionally be joined (*see* col. 6, lines 49-56) alone distinguishes applicant's anchoring device, which is taught as being "made of molded plastic material," inherently rendering it of unitary construction.

Moreover, contrary to the Examiner's contention, even if the attachment of items 54 and 56 to each were regarded, *arguendo*, as constituting a single structure, such a structure would still not satisfy the limitations delineated for the anchoring device included in the decking system of claim 33, because they would fail to satisfy the required relationships between the first, second, and third widths.

At page 11, the Examiner has discounted applicant's claim recitation with respect to the terminology "adapted to." stating the following:

Applicant is reminded that the anchoring device can be adapted to main the top element in a predetermined position during use for joinder of two adjacent boards which have been pre-cut with receiving slots, and to position the bottom element upon one of the support boards on which two adjacent boards rest for attachment of the anchoring device to the support board for anchoring and support of the two adjacent boards.

More specifically, the Examiner's contention that the decking system of claim 33 is obvious in light of Chen et al. and Livezey is submitted to be untenable under the Federal Circuit's ruling in *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, that "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (emphasis added). Even if, *arguendo*, elements 54 and 56 collectively form an "anchoring device," they are not properly arranged in Chen et al., because they are inverted from the disposition recited by claim 33. Nothing in either reference or the combination thereof contains any suggestion of the inversion required.

The courts have rejected the "cherry picking" evident in the Examiner's combination of the different embodiments of the Chen et al. disclosure as if they constituted a single disclosed embodiment. ["...for the instant rejection under 35 USC 102(e) to have been proper, the Flynn reference must clearly and unequivocally disclose the claimed compound or direct those skilled in the art to the compound without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference." *In re Arkley et al.*, 59 C.C.P.A. 804, 807; 455 F.2d 586, 587; 172 U.S.P.Q. (BNA) 524 (C.C.P.A. 1972)]. The respective embodiments in Chen's Figs. 5A and 5B are clearly distinct, since they are taught as being used for effecting different types of joints and thus inherently are not disclosed as a single embodiment, in the manner proposed by the Examiner.

Applicant again respectfully maintains that "top" and "bottom" are not merely relative terms. In the context of any flooring system, including both Chen's and

that of the present decking system, “top” and “bottom” are clearly defined by the direction of gravity. Claim 33 calls for the adjacent boards of the present system to “rest” on support boards. “Top” and “bottom” are further distinguished by Chen’s recitation, e.g. in claim 1, of “upper” and “lower” surfaces of tiles in a covering system, and disclosure of tiles that have a top “print layer having a design used to simulate granite, wood, brick, and the like.” Col. 4, lines 26-27. Clearly, tiles are appointed to be installed such that this print layer, which provides only an aesthetic function, is present on the exposed or “top” surface.

Likewise, applicant respectfully submits that a person having ordinary skill in the pertinent art would regard the use of the term “top” in regard to the anchoring device delineated by feature (II.) of claim 33 as being constrained by the use of the same word “top” in reference to the decking boards of feature (I.), both in accordance with ordinary construction practice. That is to say, decking, a type of floor construction, is universally regarded as being installed on “top” of, i.e., vertically above, support structure such as floor joists. The Examiner’s reading contravenes that usage.

Even if, *arguendo*, Chen et al. provided a structure that otherwise had the structural configuration delineated for the anchoring device aspect of claim 33, but for top-to-bottom inversion, such teaching would still fall short of disclosing or suggesting the decking system of claim 33 (and claims dependent thereon). The assembly disclosed by Chen et al. places wide spline piece 56 of Figs. 4(a) and 5(a) at the top, not the bottom as required by applicant’s claim 33. There would be no motivation for the

significant reconstruction required to reach applicant's claimed decking system. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Furthermore, a skilled artisan would be motivated not to carry out such a reconstruction by inversion of the Chen et al. attachment device, since the function recited for piece 56 ("to simulate the concave surface of grout," col. 6, lines 23-25) would be defeated, if the device were inverted. Applicant respectfully submits that such a reconstruction is precluded under *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed Cir. 1984).

The confusion arising from the Examiner's inversion of the supposed Chen anchoring device is even further compounded by the Examiner's characterization of the sides A2 as defining a width A3 of what he purports to be the top element A1 [*sic*]. On the other hand, claim 33 calls for an anchoring device having a "substantially flat horizontal top element having a top view configuration which includes two sides..." (emphasis added). Applicant respectfully submits that the allegedly anticipatory structure does not have the substantially flat horizontal top view configuration delineated by claim 33. Instead, the portion of element 54 that extends downward from the projections received in board grooves A25 in the depiction of annotated Fig. 10 (the "top" of the Chen et al. structure as apparently understood by the Examiner⁵) precludes the Examiner's conclusion, because it establishes a surface of element "A1" that is not substantially flat horizontally.

⁵ It is to be understood that the Examiner's purported anticipation requires that combined elements 54 and 56 of Chen et al. be viewed in an inverted orientation. That is to say, in the depiction of Figs. 5(a) and 10, the feature supposed to correspond to the "top" of applicant's anchoring device is toward to the bottom of the figures, and the supposed "bottom" is toward the top of the figures.

The presence of the aforesaid protrusion from the top surface is precluded from applicant's claimed anchoring device by the use of the transitional phrase "consisting essentially of." Such a protrusion would markedly change the functionality of the anchoring device, e.g. by interfering with the insertion of the metal fastener used to secure the three beams involved in the decking system.

The Examiner has discounted the use of the transitional phrase "consisting essentially of" in claim 33 as follows:

Further, for the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising". See, e.g., PPG, 156 F.3d at 1355,48 USPQ2d at 1355. See MPEP 2111.03.

Applicant respectfully submits that applicant's deliberate selection of the partially closed transitional phrase "consisting essentially of" in claims 29 and 33, instead of the term "composed of," clearly signals applicant's understanding of claim scope, in accord with firmly established Patent Office practice.

More specifically, claims 29 and 33, first presented by way of the amendment dated October 14, 2004, were drafted using the transitional phrase "consisting essentially of." These claims correspond generally to previous claims 21 and 24, respectively. Claims 29 and 33 recite verbatim the features of old claims 21 and 24, but with the transitional term "comprising" replaced by "consisting essentially of."

Applicant is unable to locate in the record any evidence suggesting that the Examiner made a determination of whether the specification or claims established

basic and novel characteristics of the subject matter of claims 29 and 33. Even less is there any indication that such characteristics have been applied in determining the effect of “consisting essentially of” on the scope of claims 29 and 33. Applicant maintains that such a determination must be made for the broadened (“comprising”) construction of MPEP §2111.03 to be permissible and must be documented to permit appropriate appellate review of the propriety of the rejections. See *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002) (holding that PTO must document its reasonings on the record to allow accountability and effective appellate review).

With respect to claim 33, it is submitted that Chen et al. discloses a portion of element 54 extending downward from the projections received in board grooves A25 in the depiction of annotated Fig. 10 (the “top” of the Chen et al. structure as apparently understood by the Examiner⁶). The presence of such a portion establishes a surface of element “A1” that is not substantially flat horizontally. This non-flat surface takes the cited structure outside the scope of claims 29 and 33, the downwardly extending portion being excluded by the language of claims 29 and 33. Applicant thus maintains that the purported anticipation of claim 33 by any structure disclosed by Chen et al. is precluded.

Like the supposed “anchoring” device of the British device discussed hereinabove in connection with the rejection of claims 29, 31, and 32, the Chen et al. multi-part spline system also is not an anchoring device. Nothing in the Chen et al. reference discloses or suggests that elements 54, 56 in combination be used in any

⁶ See note [4] above concerning the inversion of the allegedly anticipatory Chen et al. structure.

manner to mutually secure three boards together, i.e., to secure two adjacent decking boards to a third support board. At best, the Chen et al. spline system attaches horizontally adjacent tiles, but nothing discloses or suggests the attachment of elements 54 or 56, whether singly or in combination, to an underlying support board, whereby the three boards are mutually secured. In fact, the Chen et al. reference is even devoid of any disclosure or suggestion that the tiles or splines used in the surface covering system be adhered in any way to an underlying support structure. On the other hand, it is known in the art that interlocking tiles, such as those of Chen et al., are often disposed as a flooring system in a “floating” manner, wherein no fixed attachment to the underlying support is used.

The Chen et al. reference further teaches that the spline system located between the tiles of the surface covering system “simulate[s] the appearance of grout.” Abstract, line 2. A person of ordinary skill in the surface covering art would recognize that grout is conventionally installed to fill the gaps between adjacently installed tiles along the entire length of each side of the tiles. The importance of such filling is explicitly recognized, e.g. at col. 8, lines 26-30. As set forth hereinabove in connection with the rejection of claims 29, 31, and 32 over the British patent, decking systems such as the instant system are installed in exterior locations with gaps intentionally left between adjacent decking boards, to permit drainage of water, e.g. as the result of rain or snow falling onto the exposed surface. Were the spline system of Chen et al. to be used in constructing the present decking system, that drainage function would be thwarted. On the other hand, were applicant’s anchoring devices used in conjunction with tiles of the type provided by Chen et al., the function of simulating grouting would

be lost. Accordingly, applicant maintains that a person having ordinary skill would not regard Chen et al. as having disclosed every feature of applicant's anchoring device and decking system. In addition, there is no motivation provided that would induce a skilled artisan to modify the spline system of Chen et al. to provide applicant's anchoring device.

Still further, nothing in the present specification suggests any anchoring device wherein the top surface of the device is at a level permitting it to simulate a grouted joint. Such a location is precluded, because the portions of the top surface distal from the center support are engaged in the decking boards' receiving slots, which inherently are below the top surface of the boards. Chen et al., on the other hand, employs the spline system to function as simulated grouting, requiring the top of the spline system to be at or near the top surface of the tiles with which the splines are used.

With respect to claims 35 and 37, the Examiner provides the following additional bases for his rejection:

Regarding claim 35, the two sides A2 of the top element A1 are symmetric to one another.

Regarding claim 37, the boards A20 are made of material selected from the group consisting of synthetic polymers, at least partially foamed synthetic polymers, wood, wood composite, and combinations thereof (col. 4, lines 22-50).

It is respectfully submitted that the foregoing statements do not materially add any subject matter pertinent to the earlier statement of rejection of claim 33 over Chen et al. Accordingly, it is submitted that the subject matter of claims 35 and 37 is

not disclosed or suggested by Chen et al., for at least the same reasons as claim 33, on which they both depend.

With respect to claim 36, the Examiner provides the following basis for his rejection:

Regarding claim 36, the groove A25 establishes an upper half A30 of each of the boards A20 above the groove A25 and a lower half A31 of each of the boards A20 below the groove A25. The upper half A30 has a greater width than the lower half A31. Compare widths A32 and A33.

Applicant respectfully submits that the statement of rejection of claim 36 perpetuates the inversion of top and bottom discussed in detail hereinabove with respect to the rejection of base claim 33 over Chen et al. While applicant agrees that features A23 establish an upper half and a lower half of the Chen et al. tiles, applicant emphatically disagrees that sections A30 and A31 can properly be regarded as “upper” and “lower” halves, respectively. Instead, it is submitted that “upper” and “lower” must be determined in light of the usage of the Chen et al. specification, wherein it is clearly indicated that the trapezoidal portion (56) of the combined spline system is installed at the level of the “upper” or “top” surface of each tile. Each Chen et al. tile is said to have a “top surface and a bottom surface.” Col. 4, line 3. A person having ordinary skill in the tiling art would indubitably regard grout, for which second spline 56 substitutes in the Chen et al. system, as being disposed on the finished side of a tiled surface, i.e. the “upper” or “top” side of a tiled floor. Attention is further drawn to claim 1, at col. 9, lines 56-57, which defines “a gap” as being formed on the “upper surface between the two tiles.” The second spline (e.g., element 56 of Figs. 4-6) is required to be “capable of fitting into said gap” (line 62). It is respectfully submitted

that this recitation clearly defines Chen et al.'s usage of the terms "top," "bottom," "upper," and "lower," in direct contradiction to the Examiner's reading, which requires inversion of top and bottom. There is no reasonable basis for suggesting that the Chen et al. decking system be installed upside-down from the ordinary sense conveyed by the depiction of the Figures, or that the Figures are to be regarded as being drawn in an inverted fashion.

The Examiner contends that width A32 of tile portion A30 is wider than width A33 of tile portion A31. Applicant completely agrees. However, it is thus submitted that when the upper and lower halves of the Chen et al. tiles are properly identified, Chen et al. teaches a width ordering ($A32 > A33$) that is exactly opposite the requirement of claim 36, that upper-half board width (W_{TB} of Fig. 8) be greater than lower-half board width (W_{BB} of Fig. 8).

With respect to claim 38, the Examiner provides the following basis for his rejection:

Regarding claim 38, the two sides A2 of the top element A1 are parallel to one another.

For the reasons set forth hereinabove concerning the rejection of base claim 33, applicant maintains that sides A2 cannot properly be regarded as the sides of top element A1, because it is the downwardly projecting feature of first spline 54, which must be regarded as the top element of the purported anchoring device disclosed by Chen et al.

In view of the amendment of claim 33 and the foregoing remarks, it is submitted that present claims 33 and 35-38 patentably define over Chen et al.

Accordingly, reversal of the rejection of claims 33 and 35-38 under 35 USC §102(e) over Chen et al. is respectfully requested.

Claim 34 was rejected under 35 U.S.C. §103(a) as being unpatentable over Chen et al. in view of Livezey and further in view of Curtis, Jr.

Applicant respectfully submits that the addition of Curtis, Jr. fails to cure the lack of disclosure or suggestion in Chen et al. and Livezey of the decking of amended base claim 33, from which claim 34 depends. For example, applicant maintains that nothing in Curtis, Jr., overcomes Chen et al.'s failure to disclose support boards to which decking boards are attached, or would motivate the inversion of the Chen et al. spline system and the modification of the spline system to delete the downward projection of element 54. All these distinctions between the decking system of amended base claim 33 and Chen et al. are set forth hereinabove in connection with the novelty rejection of claims 33 and 35-38 over Chen et al. and Livezey.

Applicant reiterates the remarks set forth above in connection with the rejection of claim 30 over the British patent and Curtis, Jr., concerning the engagement of the Curtis fastening device to a supporting I-beam as being entirely different from the configuration of applicant's decking system, in which the bottom of the anchoring device is placed upon the supporting joist. As delineated above, the Curtis device engages a supporting I-beam using a slot in the side of the vertical portion of the fastening member. The slot receives the top flange of the I-beam, a clearly different form of engagement.

In view of the foregoing remarks, it is submitted that present claim 34 patentably defines over Chen et al., Livezey, and Curtis, Jr. Accordingly, reconsideration of the rejection of claim 34 under 35 USC §103(a) as being unpatentable over Chen et al. and Curtis, Jr., is respectfully requested.

CONCLUSION

In view of the amendment of the specification, the amendment of claims 29 and 33, the amendment of Fig. 7 of the drawings, and the foregoing remarks, it is respectfully submitted that the anchoring device of claim 29 (and claims 30-32 dependent thereon); and the decking system of amended claim 33 (and claims 34-38 dependent thereon) are not disclosed or suggested by any combination of the art references applied, and thus meet the conditions for patentability required by 35 U.S.C. §§ 102, 103(a), and 112. The present application is thus believed to be in condition for allowance.

Accordingly, reconsideration of the rejection of claims 29-38 and allowance of the present application are earnestly solicited.

Respectfully submitted,

Harry W. Eberle, III

A handwritten signature in black ink, appearing to read "Ernest D. Buff", is written over a solid black horizontal line.

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Appendix

Replacement Drawing Sheet